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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,922	02/14/2001	Kari Einamo	060258-0277084	1058
909 7590 10/08/2008 PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102				
EXAMINER				
CHO, UN C				
ART UNIT		PAPER NUMBER		
2617				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/762,922

**Applicant(s)**

EINAMO, KARI

**Examiner**

Un Cho

**Art Unit**

2617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date: \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 1 objected to because of the following informalities:

Claim 1 line 8 recites "tracing is sent;," it should recite --tracing is sent;-- instead.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 5, 7 – 8, 10 – 11, 13 – 14 and 16 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (US 6,009,321).

Regarding claim 1, Wang discloses transmitting and receiving signaling messages in a functional entity for subscriber mobility management in a mobile communication system (a simplified communication network; Wang: Col. 2, lines 39 – 62); receiving a trace command in said functional entity (a wireless phone has set up a routine to be used for incoming calls; Wang: Col. 2, lines 63 – 64), the command identifying at least one subscriber whose signaling messages are to be traced and indicating a tracer to which information obtained during tracing is sent (upon execution of the routine (Fig. 2) the MSC extracts information from

the initiated call such as a called party number and a calling party number; Wang: Col. 2, line 65 through Col. 3, line 9); starting tracing in the functional entity, which tracing comprises sending to the tracer a copy of a signaling message related to the subscriber to be traced in response to receiving or transmitting the signaling message in the functional entity (the extracted information is sent to its associated HLR for storage; Wang: Col. 3, lines 9 – 13). Wang as applied above does not specifically disclose wherein the copy of the signaling message sent to the tracer is identical to the signaling message of the subscriber. However, Wang discloses that information is extracted from the initiated call (Wang: Col. 2, line 32 through Col. 3, line 13 and Col. 2, lines 6 – 15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to understand that the extracted information is identical to the information being transmitted between the calling party and the called party.

Regarding claim 2, Wang discloses wherein the trace command also indicates the type of the signaling message to be traced, and the copy of the signaling message is sent only if the signaling message is of the type to be traced (the routine is executed for *incoming calls* (type) to the wireless telephone, thus the routine indicates the type of signaling message to be traced, then information is extracted for the incoming call and is sent to a storage device (HLR); Wang: Col. 2, line 65 through Col. 3, line 13 and Col. 2, lines 6 – 15).

Regarding claim 3, Wang discloses wherein tracing starts from the start message of a dialogue related to the subscriber to be traced (the routine is executed when there is an incoming call, which is the beginning of a dialogue; Wang: Col. 2, lines 3 – 15).

Regarding claim 4, Wang discloses wherein tracing of the subscriber's signaling message stops in response to the fact that the dialogue which started tracing ends (once the call is completed a log is created, which can be retrieved; Wang: Col. 3, lines 21 – 29).

Regarding claim 5, Wang discloses receiving a stop command of tracing in the entity, the command indicating the subscriber whose signal message tracing is to be stopped, and stopping tracing of the signaling message related to said subscriber (upon completion of the call the routine ends accordingly; Wang: Col. 2, line 65 through Col. 3, line 29).

Regarding claims 7, 10 and 13, the claims are interpreted and rejected for the same reason as set forth in claim 1.

Regarding claims 8, 11 and 14, the claims are interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 16, Wang discloses the network element comprising a processor configured to contain the unit and the application part (the MSC obviously comprises a processor configured to extract information and the application part to execute the routine; Wang: Col. 2, line 65 through Col. 3, line 29 and Col. 2, lines 3 – 15).

Regarding claim 17, Wang as applied above discloses wherein the network element is one of a MSC, HLR and VLR (Wang: Col. 3, lines 5 – 20).

4. Claims 6, 9, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Clarke et al. (US 5,793,752).

Regarding claim 6, Wang in view of Kalmanek as applied above does not specifically disclose wherein the signaling messages of the MAP protocol are traced. In an analogous art, Clarke remedies the deficiencies of Wang by disclosing that the signaling messages of the MAP protocol are traced (Col. 5, line 25 through Col. 6, line 15 and Col. 11, lines 23 – 29). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Clarke to the system of Wang in order to provide a monitoring system that can provide an accurate feedback to the user just by recognizing a predetermined set of message characteristics, which is sufficient to identify a type of node functionality, and associating the type of functionality identified by said set of characteristics with said particular node.

Regarding claim 9, Wang discloses that the network element is arranged to start sending copies of the signaling message related to the subscriber in response to the dialogue (the routine is executed when there is an incoming call, which is the beginning of a dialogue; Wang: Col. 2, lines 3 – 15).

However, Wang as applied above does not specifically disclose wherein the signaling messages to be traced are message of the MAP protocol. In an

analogous art, Clarke remedies the deficiencies of Wang by disclosing that the signaling messages to be traced are messages of the MAP protocol (Clarke: Col. 5, line 25 through Col. 6, line 15 and Col. 11, lines 23 – 29). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Clarke to the system of Wang in order to provide a monitoring system that can provide an accurate feedback to the user just by recognizing a predetermined set of message characteristics, which is sufficient to identify a type of node functionality, and associating the type of functionality identified by said set of characteristics with said particular node.

Regarding claims 12 and 15, the claims are interpreted and rejected for the same reason as set forth in claim 9.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1 – 17 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un Cho whose telephone number is (571)272-7919. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

/U. C./  
Examiner, Art Unit 2617